

INCH-POUND

MIL-T-27/306B
2 June 2003
SUPERSEDING
MIL-T-27/306A
13 March 1991

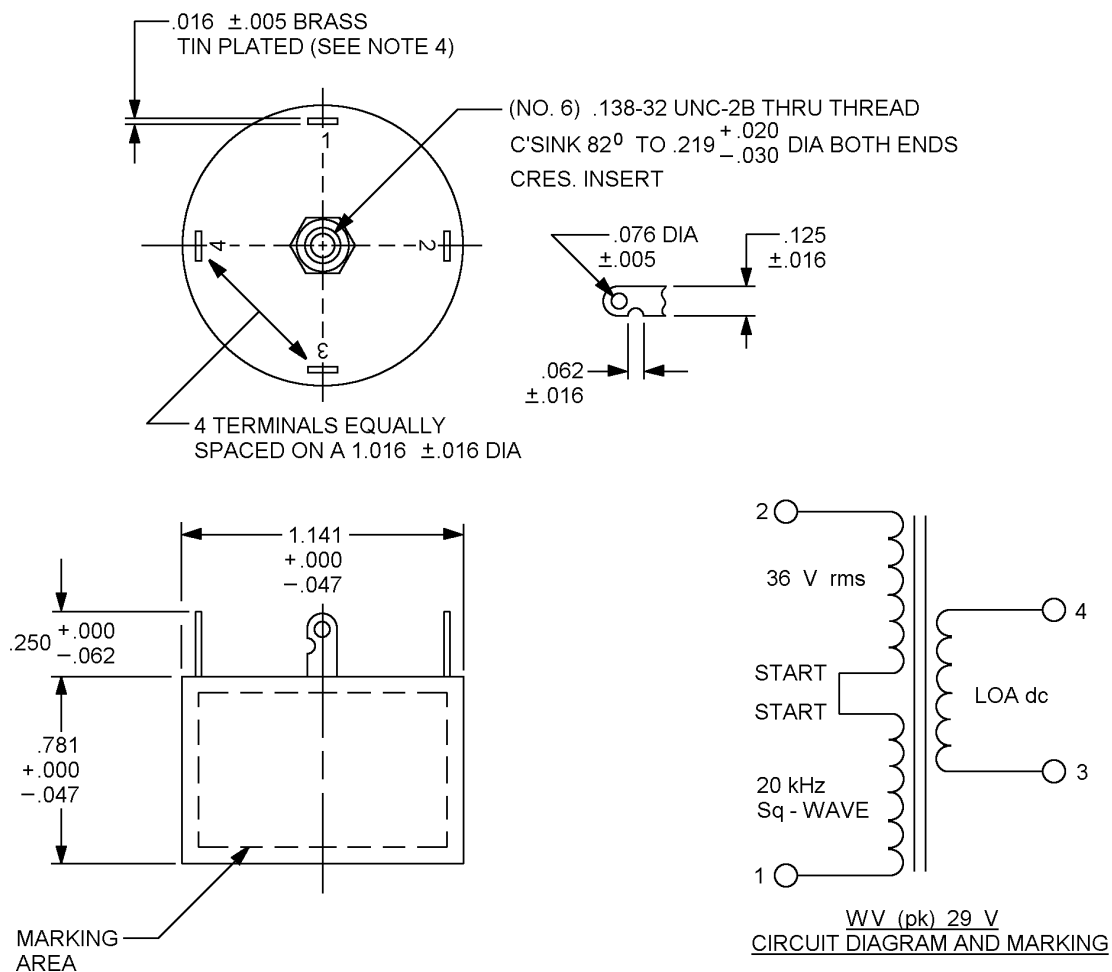
MILITARY SPECIFICATION SHEET

TRANSFORMER, SATURABLE

Inactive for new design
after 13 March 1991.

This specification is approved for use by all Departments and Agencies of the Department of Defense.

The requirements for acquiring the products described herein shall consist of this specification and MIL-PRF-27.



Inches	mm	Inches	mm
.005	0.13	.125	3.18
.016	0.41	.138	3.61
.020	0.51	.219	5.56
.030	0.76	.250	6.35
.047	1.19	.781	19.84
.062	1.57	1.016	25.81
.076	1.93	1.141	28.98

NOTES:

1. Dimensions are in inches.
2. Metric equivalents are given for general information only.
3. Marking shall be on the side of the case.
4. Brass, 70 percent Cu, 30 percent Zn in accordance with ASTM-B36 and ASTM B121.

FIGURE 1. Dimensions and configurations – Continued.

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REQUIREMENTS: (When designations in parentheses, i.e., (1-2) are used, they indicate the winding and the extreme terminals of the winding.)

Electrical ratings:

Voltage:

(1-GND): 36 volts rms (input), 20 kilohertz square wave.
(2-GND): 17 to 20 volts.

Current:

(1-2): 10.5 milliamperes.
(3-4): 1.0 amperes dc.

Volt-ampere rating: 0.304 volt-ampere.

Primary impedance (1-2): 3,100 ohms.

Working voltage (peak): 29 volts.

Design and construction:

Dimensions and configuration: See figure 1.

Duty cycle: Continuous.

Case: Encapsulated.

Material: Epoxy.

Terminals: Solder lug.

Terminal height: .250 inch, maximum.

Weight: 36.86 grams, maximum.

Operating temperature range: -55°C to +130°C.

Terminal strength: MIL-STD-202, method 211, test condition A, 2.0 pounds.

Dielectric withstanding voltage (at sea level): 100 volts rms.

Electrical characteristics:

Rated load (see figure 2): With 36 volts rms, 20 kilohertz square wave across (1-GND), current in (1-2) shall not exceed 10.5 milliamperes dc.

Voltage across (2-GND): 17 to 20 volts.

Current across (3-4): 1.0 ampere dc.

DC resistance:

(1-2): 12.8 to 17.2 ohms.
(3-4): 0.0025 to 0.0035 ohm.

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Temperature rise: 50°C with 36 volts rms, 20 kilohertz square wave across (1-GND) and with 17 to 20 volts across (2-GND) at an ambient temperature of 80°C.

Vibration (high frequency): MIL-STD-202, method 204, test condition A.

Shock (specified pulse): MIL-STD-202, method 213, test condition H.

Quality assurance provisions:

Qualification inspection: Not applicable.

Quality conformance inspection: Groups A and B tests of MIL-PRF-27 shall be applicable.

Marking location: See figure 1.

Part or Identifying Number (PIN): M27/306-01.

Custodians:

Army – CR
Navy – EC
Air Force – 11

Preparing activity:
DLA – CC

(Project 5950-1145)

Review activities:

Army – AR, CR4, MI
Navy – AS, MC, OS, SH
Air Force – 19, 99